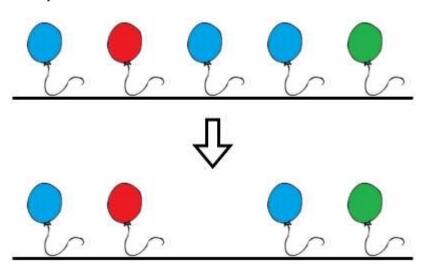
# **Minimum Time to Make Rope Colorful** (View)

Alice has n balloons arranged on a rope. You are given a **0-indexed** string colors where colors[i] is the color of the ith balloon.

Alice wants the rope to be **colorful**. She does not want **two consecutive balloons** to be of the same color, so she asks Bob for help. Bob can remove some balloons from the rope to make it **colorful**. You are given a **0-indexed** integer array neededTime where neededTime[i] is the time (in seconds) that Bob needs to remove the ith balloon from the rope.

Return the *minimum time* Bob needs to make the rope *colorful*.

#### **Example 1:**



Input: colors = "abaac", neededTime = [1,2,3,4,5]

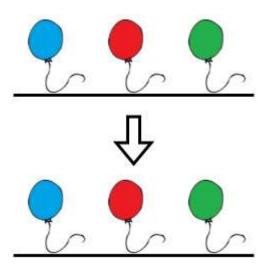
Output: 3

Explanation: In the above image, 'a' is blue, 'b' is red, and 'c' is green.

Bob can remove the blue balloon at index 2. This takes 3 seconds.

There are no longer two consecutive balloons of the same color. Total time = 3.

### **Example 2:**



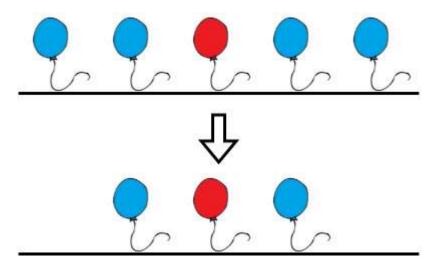
Input: colors = "abc", neededTime = [1,2,3]

Output: 0

Explanation: The rope is already colorful. Bob does not need to remove any

balloons from the rope.

## Example 3:



Input: colors = "aabaa", neededTime = [1,2,3,4,1]

Output: 2

**Explanation:** Bob will remove the ballons at indices 0 and 4. Each ballon takes 1 second to remove.

There are no longer two consecutive balloons of the same color. Total time = 1 + 1 = 2.

### **Constraints:**

- n == colors.length == neededTime.length
- 1 <= n <= 10<sup>5</sup>
- 1 <= neededTime[i] <= 104
- colors contains only lowercase English letters.